

# Open questions in the cross-linguistic conception of the grapheme: (supra)segmentality and cognitive reality

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In 2019, a definition of *grapheme* intended as cross-linguistically applicable was proposed as part of a larger enterprise of defining comparative concepts suitable for the description and comparison of all types of writing systems (cf. Meletis 2019). According to this definition, the grapheme is a minimal unit of writing that is lexically distinctive and has linguistic value, mainly by relating to other types of linguistic units such as phonemes, syllables, or morphemes. While these criteria – the distinctiveness criterion, linguistic value criterion, and minimality criterion – are sufficiently general in nature to account for the basic units of many typologically diverse writing systems, they raise several problems and open questions, the most important of which shall be addressed in this talk in discussing two major points:

(1) Firstly, certain problems arise due to the definition’s synchronic focus on modern writing systems. Against the background of universal developmental tendencies in the history of writing (including the gradual development of phonography out of/within morphography and vice versa), a definition of grapheme must also incorporate a diachronic dimension in order to be capable of accounting for transitory stages and ‘multiple identities’ of graphemes. Furthermore, a central phenomenon of writing is predominantly prevalent in ancient writing systems: the use of determinatives. (A rare modern example is the use of okurigana in Japanese and – in a much broader sense – the use of emojis.) Given that they are commonly ‘mute’, i.e., do not have a linguistic correspondence inclusive of a phonological representation the same way that phonographic or morphographic graphemes do, can determinatives even be conceived of as graphemes? If not, how do they fit into a graphematic analysis of the writing systems in question (e.g., cuneiform, Egyptian, Mayan)? In this context, not only must the linguistic value criterion be reevaluated but the possible existence of *zero graphemes* (by analogy with zero morphemes) must be discussed. Also, to account for the function determinatives assume in conjunction with the graphemes they accompany, what was initially conceived of as a segmental graphematic analysis – i.e., one focused on the individual written segment – shall be extended to a suprasegmental analysis (in the vein of the suprasegmental paradigm in German grapholinguistics, cf. Berg/Primus/Wagner 2016). Aside from graphemes, such an analysis assumes *graphematic components* as subsegmental elements of graphemes (such as the phonological and semantic components in the writing system of Chinese, cf. Myers 2019) as well as *complex graphemes* (cf. Meletis 2019) and *graphematic clusters* as suprasegmental written elements that consist of multiple graphemes and/or graphematic elements.

A suprasegmental analysis can also better account for several phenomena that pose challenges to the 2019 definition, such as polyvalence (cf. Okada 2021), punctuation, the semasiographic use of graphic material not classified as writing (such as emojis, cf. Dürscheid/Meletis 2019), and the idiosyncratic functions of frequent graphematic combinations including digraphs (cf. Osterkamp/Schreiber 2021), complex graphemes (cf. Reinken 2022), and ligatures (such as in abugidic systems), which also raise problems for the decomposability expected of individual graphemes.

(2) The second aspect that will be discussed is Peter T. Daniels’ (yet) unchallenged claim that a unit ‘grapheme’ cannot exist since emic units (which are terminologically reflected in the suffix *-eme*) are unconscious units of the human mind (cf. Daniels 1991). In this talk, it is argued that emic units cannot only be units we as language users are conscious of; the graphemes consciously acquired in literacy acquisition are arguably even the units that allow us to cognitively conceive of ‘unconscious’ units such

as phonemes or morphemes (cf. Davidson 2019). In other words, writing is not only a linguistic phenomenon itself but, at a meta-level, also a metalinguistic analysis of language that allows or at least facilitates the abstract (i.e., emic) conceptualization of phenomena such as sounds and extralinguistic concepts in the first place, making possible otherwise elusive units such as ‘phoneme’ or ‘word’. This argument highlights the special importance of: the grapheme as a descriptive as well as a (psychologically real) processing unit, writing as a subject of research in linguistics, and grapholinguistics as the interdisciplinary field devoted to studying all its aspects.

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